DOCUMENT RESUME

ED 418 431 CS 216 322

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TITLE Speech Genres in Writing Cognitive Artifacts.
PUB DATE 1997-12-00
NOTE 14p.; Paper presented at the Annual Meeting of the National Reading Conference (Scottsdale, AZ, December 3-6, 1997).
PUB TYPE Reports - Research (143) -- Speeches/Meeting Papers (150)
EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Audience Awareness; Content Analysis; Higher Education; Instructional Effectiveness; *Learning Processes; Research Methodology; *Textbook Content; *Textbooks; *Writing for Publication
IDENTIFIERS Bakhtin (Mikhail); *Cognitive Artifacts; *Speech Genres; Text Factors; Voice (Rhetoric)

ABSTRACT

This paper reports on the analysis of an instructional text on the basis of M. Bakhtin's (1986) notion of speech genres, which is used to theorize the different influences on the writing of an instructional text. Speech genres are used to reveal the multiple voices inherent in any text: the writer's, the reader's, and the text's. The author-written cognitive artifact was designed and written to support learners within a reflexive, co-participatory teaching approach. Methodological issues are examined in the design and use of this tool to systematically examine the significance of writing a text to support learning. Although speech genres are likely to resist a complete examination, being able to identify critical ones through a systematic analysis may assist educators in their design efforts. (Contains 20 references and 2 figures. An appendix show the three-step analysis procedure.) (Author/NKA)

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ED 418 431

1997 NATIONAL READING CONFERENCE - SCOTTSDALE, ARIZONA*
December 2-6, 1997

*Area 4: Learning/Teaching Processes*

# Speech Genres in Writing Cognitive Artifacts

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**Abstract**

This paper reports on the analysis of an instructional text on the basis of Bakhtin's (1986) notion of speech genres, which is used to theorize the different influences on the writing of an instructional text. Speech genres will be used to reveal the multiple voices inherent in any text; the writer's, the reader's, and the text's. The author-written cognitive artifact was designed and written to support learners within a reflexive, co-participatory teaching approach. Methodological issues will be examined in the design and use of this tool to systematically examine the significance of writing a text to support learning.

## Illuminating the Relationship of Reader & Writer

**Moral dilemmas as temporary closure.** After shipping off a book manuscript to a publisher, the closure I needed as co-author came not from a sense of relief, but from a set of moral dilemmas seeing it fixed between covers. Rather than elation, I felt pressed by: "What have I written?" Three earlier versions had been annually modified, so it was uncomfortable to realize that it would be up to four years before a second edition was possible. Four years is a long time in which our understanding of the content and the means to support student learning would grow significantly.

The three moral dilemmas that took hold of me and shaped this inquiry include: (1) negotiating audience, content, and treatment, (2) writing for learner and adopter, and (3) balancing prescription and possibilities. Publishing's practical considerations may clash with one's intent. Generally, the scrutiny that publishers give to proposed products helps authors to think through the market they are writing for and ultimately bring readers and writers together. However, published products influence what is taught and how it may be taught. Another reality is that a writer writes not only for readers and learners, but also for adopters. One cannot only write for the learners as potential adopters are sometimes looking for something quite different. In the case of the text under study, its design was based on reflexive teaching, an approach not often seen in texts. A third moral dilemma was balancing prescription and possibilities. Textbooks are by their nature prescriptive. Balancing content, structure, pedagogical features, and learning activities within a particular instructional approach was a major challenge in the writing. Traditional texts in the field of instructional design advocate a particular model for designing instructional events (e.g., Dick & Carey, 1996; Gagne, Briggs & Wager, 1992), while

CS 216 322



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our approach encouraged individualized design models as we presented generic features of instructional design (Shambaugh & Magliaro, 1996).

Moral qualms, however, are necessary. Without them, a "forgetting" sets in and the work and the writer becomes distanced from the readers and learners (Garrison, 1996). Reflection on these and other issues must lead to continually re-examining one's perspective and resultant actions. My first reflection was at the National Reading Research Conference in 1996, the theme of which was "Literacy and Technology for the 21st Century." There I reported on the prospects of converting this published text into an electronic version. Some of the research issues for such a possibility I categorized under action research, rigor, responsibility, and moving research results to practice. This paper is a continuing effort to extend this inquiry — to look for ways to address the moral issues of writing for readers, to study ways to examine what we write, and ways to help others reflect and analyze their actions. In addition, this text was written to support student learning via a reflexive teaching approach in which all participants are learners. It is necessary to scrutinize what one has written in the context of how it was designed to be used. Bakhtin's idea of speech genres is proposed as a reflective tool to ask this particular moral question of a writer: What have I written?

**Text as mediator.** In this inquiry, text is viewed from a sociocultural perspective, not only concerned with the structure of tools (e.g., language, diagrams, arithmetic), but also the role that these tools play in the mediation or influencing of human actions. Vygotsky claimed that "... the psychological tool alters the entire flow and structure of mental functions. It does this by determining the structure of a new instrumental act, just as a technical tool alters the process of a natural adaptation by determining the form of labor operations" (1981, p. 137). Text as mediation takes on a significant role in educational programs and is used for the purpose of influencing human behavior. As Wertsch (1991) prompts "When a central role is attributed to mediational means, it becomes essential to specify the forces that shape them" (p. 33). In the case of an instructional text, why does it have the properties that it does? This sociocultural approach to such questioning prompts us to consider not only the individual context, but also the cultural, historical, and institutional factors. Furthermore, mediational tools, such as instructional texts, provide a means to link individual and sociocultural factors, but this requires that the design of such texts acknowledge these factors.

My definition of an instructional text is one that has been written to support learning *within a particular instructional framework*, as opposed to a textbook, which supports student learning of content only. It is my belief that instructional texts should communicate an instructional framework, providing support to adopters on the ways in which this approach can be enacted. Both types of texts carry particular expectations from users, both teachers and students, particularly in their structure and pedagogical features. Here the ideas of Donald Norman (1993) come into play: that the purpose of these thinking tools, cognitive artifacts, is to extend human abilities, and that representations of ideas or physical features must be matched to the user's needs. This matching is a problematic design problem for the publication of an instructional text that remains fixed in terms of content, sequence, and activities. The representation one chooses gives ideas particular meaning; even when chosen to serve learner needs, they remain representations of expertise, privilege, and power of more "capable others"

(Vygotsky, 1978, p. 86). To design a thinking artifact, one that serves learner needs in terms of the nature of what is to be learned, and incorporates pedagogical features, is a daunting task.

Another statement from Wertsch worth noting, is that our well-intentioned efforts to design mediational means, cognitive artifacts, means introducing "unintended effects" (1991, p. 38). One unintended effect is that mediational means become abstracted from social activity. They become decontextualized mediational means (Wertsch, 1985). Thus, even in the explicit design of learner-centered texts, this loss of context, which is inherent in any representation, must not be forgotten. Significant time and effort from the writer and book designer are necessary to address this decontextualization, if a learner-centered cognitive artifact is desired. This re-contextualization can never be fully realized in a product that is itself removed from experience.

A second unintended effect is dialogicality, a Bakhtinian notion that all texts, whether written or spoken, consist of multiple authors and voices. Dialogicality is all about relationships (Bakhtin, 1981, p. 182). Analytically, Bakhtin regarded the utterance as the fundamental unit of communication between humans. The nature of utterances are that they are spoken or written from a point of view, what Wertsch calls voice, and they imply addressivity in two ways: who is doing the talking and who is being addressed (Wertsch, 191, p. 53). In addition to the multiple ways that utterances can take in face-to-face communication (e.g., parody, irony, sarcasm), Bakhtin described two others: social languages and speech genres. A social language is "a discourse peculiar to a specific stratum of society within a given social system at a given time" (Holquist & Emerson, 1981, p. 430). In addition to social languages, which are based on one's social position, there are speech genres, which are characteristic in "typical situations of speech communication" (Bakhtin, 1986, p. 87). Speech genre is Bakhtin's (1986) label for the "relatively stable set of utterances" that are employed in any discourse, whether they be Tuesday night bowling, kitchen table interactions, or research conference proposal writing. As Bakhtin says, "Certain features of the language take on the specific flavor of a given genre: they knit together with specific points of view, specific approaches, forms of thinking, nuances and accents characteristic of a given genre" (p. 289). Speech genres are like a "currency" in the exchange of ideas (Graue & Marsh, 1996), and as "resources for performance, available to speakers for the realization of specific social ends in a variety of creative, emergent, and even unique ways" (Bauman et al, 1987, pp. 5-6). However, speech genres can also limit this exchange. "It goes without saying that these languages differ from each other not only in their vocabularies; they invoke specific forms to for manifesting intentions, forms for making conceptualization and evaluation concrete" (Bakhtin, 1981, p. 289).

Bakhtin regarded the utterance as a unit of analysis if it is studied in a whole sense, meaning both primary (simple) genres and secondary (complex genres). Bakhtin's characterized speech genres (1986) as being problematic to study considering their heterogeneity. However, Bakhtin acknowledged that within fields of human endeavor relatively stable sets of utterances, or speech genres, exist. Within any artifact, multiple voices exist — that of the writer, reader, and voices in the artifact itself.

In summary, mediational texts, including instructional texts, are inherently situated in a sociocultural context, involving historical, cultural, and institutional settings. The utterances within these materials involve social languages and particular speech genres, and are dialogic in nature, meaning that they involve multi-voices, involving both writer and reader. Speech genres (both written and oral) in instructional materials depict conceptions and categories of what is to be learned and communicate how the reader's learning is to be interpreted. Frequently, it is the case that this interpretation is influenced by how the teacher uses the text, but the text's framing of this interpretation in its design, pedagogical support, and assessment methods is frequently adopted wholesale by the teacher. The significance of speech genres for this inquiry is that they inherently influence interactions. Speech genres are proposed as a tool to supplement a teacher's reflective practices as well as student reports of their perceptions of instructional materials. For teachers who develop their own materials, this reflective/analytical tool may help them to think through the implications of what they write by examining the speech genres within the multiple voices of reader, writer, and text.

## Using Speech Genres to Analyze an Instructional Text

**Instructional setting.** The setting for the instructional text under study is a graduate course in instructional design. A formative version was used in a graduate course during the Fall 1996, preceded by three evolutionary versions which were field tested (Summer, Fall 1995, Fall 1996). The intent of the text is to support the learning of the major processes of instructional design (e.g., learner beliefs, design tools, needs assessment, sequencing, assessment, media, and program evaluation) presented within a reflexive teaching model in which dialogue between the participants — teacher and student, student and student — is a key feature. The dialogic nature of learning tasks and activities enables teachers and students to learn alongside each other. Instructional materials include readings, activities, and the instructional text, co-authored by the instructors. Results of analysis of instruction and materials on student learning, as well as student perceptions of instructors, instruction, and materials have been reported (Shambaugh & Magliaro, 1995, 1996). The literacy issues of a learner-centered design have also been reported (Shambaugh, 1996a, 1996b); in particular, the moral dilemmas of creating such a text and the design issues of a learner-centered text for print and electronic variations.

**Analysis.** The data source for this paper consists of a 300 page, 10-chapter text on instructional design, sequenced on the basis of 30 design activities with supporting text, nine fictional stories, glossary, and index. The analysis consisted of examining the multiple contexts for the writer, reader, and artifact, and their influence on the multiple voices within all three. There was a great deal of trial and error attempting to come up with a procedure in which to identify particular genres and their influence on voice. It was thinking I had not done before - the relationship of speech genre to the voices within writer, reader, and artifact. When I equated speech (oral and written) genres with context, then it was easier to think about the many influences on all three. The procedure consisted of: (1) setting up a column listing writer, reader, and artifact and recording salient characteristics of writer, reader, and artifact in the learning setting; (2) clustering these characteristics into themes; (3) matching these themes with particular

speech genres associated within the existing culture, recorded in a fourth column; and (4) from this information attempting to list and describe the principal voices; in other words, "who is doing the talking?"

**(1) Characteristics of writer, reader, and artifact.** Appendix 1 includes data recorded and reduced in Steps 1-3 of this procedure. The first step involved listing the characteristics of writer, reader, and artifact in the learning setting, which was based on my experiences with analysis of instruction over five settings (Shambaugh & Magliaro, 1996, 1995). Writer characteristics were derived from my personal working logs in which I had reflected on the writing process involved in the four versions of this text; reader data was pulled from student evaluations and personal conferences with students; characteristics of the artifact were retrieved from a briefing document submitted to the book publisher.

**(2) Clustering characteristics into themes.** Characteristics from this list were then examined for commonalities and several themes emerged: writer themes included expertise, book writing, and collaboration; for readers themes includes identity, professional goals/aspirations, and student expectations; and artifact themes included requirements of publisher, adopter, user, and writer.

**(3) Identifying speech genres that match themes.** To match coded themes with speech genres involved a careful thinking about "who is doing the talking?" for each theme. These genres are summarized in Figure 1.

Speech genres for writers. Three themes were identified for writers: expertise, book writing, and collaboration. For the theme of *expertise*, five different influential speech genres emerged. The first is a societal view that education is necessary, although the views on how this education should be undertaken differ considerably. A second genre involved the instructional design discipline known as instructional systems development, whose traditional conceptualization is based on systems theory and a knowledge base that prompts prescriptive models to ensure behaviors and outcomes. A third speech genre for expertise in this use of the text is educational psychology, which appropriates theories of learning, from which principles of learning can be extracted. A fourth speech genre includes teaching research, although it is not clear as how research can influence professional practice. A fifth genre that influenced us as writers is, of course, the academy, that research and publication are necessary aspects of the profession.

One speech genre for the *book writing* theme was identified as the traditional textbook. Most people have many years of familiarity with the look and feel of textbooks, and the pull to re-create such products is very strong. A second speech genre is a cognitive orientation as a predominant influencer in the design of the text, both in its graphic layout and the representations used in the text. Cognitive science has abstracted representations of the functioning of the human memory system (Gagne, 1985) and used this knowledge to recommend cognitive restructuring to design thinking artifacts such as books and hypermedia (Norman, 1993). A third speech genre is not a theoretical perspective, but concerns of authority, that what one writes and is accepted for publication are truth statements to be accepted by readers, and there is a moral responsibility for making decisions on content and treatment that will influence readers.

Figure 1: Identifying speech genres that match themes.

Writers

| **Theme** | **Speech Genre-"Who's Doing the Talking?"** |
|---|---|
| Expertise | Education: different views on how to direct or support learning<br>Instructional systems development discipline: prescriptive conceptualization and pressures to simplify design process<br>Educational psychology: range of theoretical basis of learning and extracting learning principles from these<br>Teaching research: value of research and development of teacher knowledge<br>Academy: research and publication |
| Book writing | Traditional texts: what does a book like?<br>Theory: cognitive structuring<br>Authority: truth statements, decisions on content and treatment, taking responsibility. |
| Collaboration | Community: writers as colleagues<br>Ethical: emergent nature of product impossible to pin down who wrote what<br>Moral: what have we written? |

Readers

| **Theme** | **Speech Genre-"Who's Doing the Talking?"** |
|---|---|
| Identity | Personal: who am I? can I do this?<br>Family and friends: pressures to perform and finish; interpersonal relationships.<br>Institutional: rules, choices, and negotiation. |
| Professional goals/aspirations | Occupational uncertainties<br>Privileged status from higher education |
| Student expectations | Cognition: ongoing efforts to make meaning out of new experiences<br>Metacognition: how much effort will be needed, what do I need to do |

Artifact

| **Theme** | **Speech Genre-"Who's Doing the Talking?"** |
|---|---|
| Publisher requirements | Industry: pressures to compete and remain profitable |
| Adopter requirements | Teachers: practical addition to make life easier |
| User requirements | Student: will this be helpful? |
| Writer requirements | Audience: is this written appropriately for the audiences?<br>Content: is the nature of the book's content appropriately structured and written for the audience?<br>Treatment: does the book have an appeal and features to support student learning? |

*Collaboration* was the third theme identified for writers. Speech genres identified included community, ethical, and moral voices. Despite having minor differences on content and treatment, overall the book writing was a collaborative effort, one in which differences that did emerge formed the basis for interesting ways on presenting and structuring content as well as strategies for writing each chapter. The human side of writing such a text revealed that trust and



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honesty were essential, as both authors were beset with deadlines and other responsibilities. Also necessary was a respect for each others work and contributions. This was truly a social constructivist product, as it would be difficult to pinpoint who wrote what.

Speech genres for readers. Three themes were identified for readers: identity, professional goals/aspirations, and student expectations. Issues of *identity* included the most items, as students revealed many private concerns about leaving jobs and returning to school, faced with a new culture and new discourse practices, vocabularies, and knowledge base to acquire. Also revealed from these items were the tacit understanding of beliefs on what learning is and how to support it, as well as tacit awareness of their own learning preferences. For identity, three voices seemed present: one's own voice, the voices of family and friends, and the institutional voice with its program rules and expectations. The theme of *professional goals and aspirations* included societal expectations to earn credentials and make a living, but in an uncertain job future. On the other hand, students as readers revealed in their self reports a belief in the responsibilities and status that their graduate education will provide for them. A third theme for readers included student expectations, which were seen primarily from a cognitive viewpoint: that humans continue to make sense out of new experiences. In addition, there are metacognitive concerns that included an affective component to them. Questions students asked themselves included: "How much effort will be needed to read this text? How do I make sense out of it? What do I need to do with it?"

Speech genres for the artifact. Examining the artifact generated four themes that were coded as requirements or needs from publisher, adopters, users, and writers. The artifact itself cannot "hear" these voices, but it is nonetheless a product of humans influencing humans in which the artifact takes on communicative functions (Bakhtin, 1991). *Publisher requirements* included taking on a product that fills a niche in their catalogue and attracts buyers, as well as customer loyalty. *Adopter requirements* are centered around appealing titles that appear to be of practical use. User needs focused mainly around reader concerns that the text will be useful. *Writer requirements* are structured around issues of writing for audience, the nature of the content, and the treatment or ways in which this content is communicated.

**(4) Listing and describing voices.** Figure 2 summarizes the voices from identified from Step 3. For writers, these voices included voices that were primarily co-participatory in nature — a collaborative voice, a supportive voice, and a process voice. A fourth voice included an institutional voice: that this effort was valued and a necessary part of making a living. Voices of readers included the student voice, with practical concerns as to the usability of the text, and a private and social voice in which one's identity is vulnerable and in flux. Moving from student to colleague is a necessary outcome in graduate school, but not one which is discussed openly. Mostly this voice is enacted in professional encounters, such as conference presentations and graduate exams. For the artifact, the four voices of publisher, adopter, reader, and writer are strong and distinct, and operate along their unique needs as discussed earlier.

Figure 2: Who is Doing the Talking: Voices of Writer, Reader, Artifact.

| **Writers** | **Readers** | **Artifact** |
|---|---|---|
| Collaborative Voice | Student Voice | Publishing Voice |
| Supportive Voice | Identity in Flux Voice | Adopter Voice |
| Process Voice | | Student Voice |
| Institutional Voice | | Writer Voice |

**Methodological issues.** This research was difficult to conduct considering there is no procedure for analyzing speech genres. One recommendation would be to have the other author scrutinize this analysis and conclusions. An objective of this roundtable is to solicit feedback on the methodological issues of examining speech genres as a theoretical construct.

Another problem was the issue of studying oneself and the impossibility of being objective about the characteristics selected. It is also problematic for anyone analyzing one's own work and the tendency to find what one is looking for. However, reflectivity for teachers is a recommended practice, and the focus of this inquiry is to examine the possibility of speech genres of reflecting on one's writing. The characteristics did originate from previous data sources used to analyze the effectiveness of instructional on student learning, so the self reports from students were authentic and triangulation of data sources can be demonstrated.

## Implications for Reading-Writing Connections

Writers, think, feel, and act within multiple speech genres. For many practitioners, genres operate within cultures of teaching, research, and institutional practices. Tension from these genres influence our thinking, feeling, and acting, and influence what we write for readers. Speech genres allow a common conversation, but this conversation may be a limiting one. Examining these genres makes it possible to begin to reveal these influences and the stances that we take, whether on paper or in the classroom. I see genres as useful ways to describe the influences on ways in which the text is used in instruction.

Becoming aware that multiple voices exist in our well-intentioned efforts to assist student learning (Gallimore & Tharp, 1987), should help us in our efforts to construct learner-centered cognitive artifacts, as well as to better understand what "learner-centered" really means in instructional settings. By analyzing speech genres inherent in text, multiple voices can be acknowledged and be made aware of so that the writer of the text is cognizant of one's frame and the implications of the text for the frame of the reader. This consciousness-raising may inform others on the construction of learner-centered artifacts and their mutual construction by teacher and student. Although speech genres are likely to resist a complete examination, being able to identify critical ones through a systematic analysis may assist us in our design efforts.

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## Appendix 1: Analysis Procedure

### Step 1: Characteristics of writer, reader, and artifact.

Data Source: working logs  Student self reports  Briefing document

| WRITERS | READERS | ARTIFACT |
|---|---|---|
| Experience with content | Leaving comfort of old setting/profession to be student | Linear |
| Experience with teaching approach supporting content | Previous learning experiences | Page limitations |
| Uncertain as to how to duplicate personal support in text | Existing expertise in 1 or more professions | Chapter organization |
| Roles of two authors different | Learning preferences tacit | Sequence on design activities |
| Mutual ideas and goals | Expectations | Stories in the back |
| Pressure of deadlines | New to discourse | Glossary non-traditional |
| Different knowledge base | New to vocabularies | Tone of text |
| Differences arising on some features | Uncertainty in program, course | Tables |
| Pressure of graphic design for text | Learning beliefs tacit | Instructor's Guide |
| Are we authors? | Size up class | Clear structure |
| Trust and honesty | Traditional student mode of listen/recall/exam | Learning activities |
| Respect for views and one's work | Structure vs. chaos | Balance of structure and narrative |
| Who wrote what? | Personal responsibility | Guidance on project transfer |
| Theoretical perspective | What does teacher want? | Multiple audiences |
| Avoiding polarized views in text | Questioning one's capability to participate in conversation | Media sidebars |
| Fictional stories risky; vacillating between keep or throw out | Design activities workbook-like | Case studies become scenarios |
| Pressures from outside commitments | | Beginning of chapter objectives |
| What should the tone of the text be? | | Index |
| Should instructor's guide have been written at the same time? | | 15-point line spacing and Palatino font |
| How to represent media throughout text? | | Room in margins to write notes |
| Scenarios limited? | | End of chapter summaries |
| What do readers need now (at each page) | | |
| How much "big picture" and when? | | |
| Is the text inviting? | | |
| Sections to cut out | | |
| Should design be based on learning principles? | | |
| Is all learning performance? | | |
| Is this the last version? | | |

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**Step 2: Clustering characteristics into themes.**

| WRITERS | READERS | ARTIFACT |
|---|---|---|
| **Expertise** | **Identity** | **Publishing requirements** |
| Experience with content | Leaving comfort of old setting/profession to be student | Linear |
| Experience with teaching approach supporting content | Learning preferences tacit | Chapter organization |
| Different knowledge base | New to discourse | Page limitations |
| Should design be based on learning principles? | New to vocabularies | Multiple audiences |
| Is all learning performance? | Uncertainty in program, course | Media sidebars |
| Is this the last version? | Learning beliefs tacit | Case studies become scenarios |
| Theoretical perspective | Questioning one's capability to participate in conversation | Beginning of chapter objectives |
| **Book writing** | **Professional goals/aspirations** | Index |
| Uncertain as to how to duplicate personal support in text | Expectations | **Adopter requirements** |
| Pressure of graphic design for text | Previous learning experiences | Instructor's Guide |
| Are we authors? | Existing expertise in 1 or more professions | Clear structure |
| Avoiding polarized views in text | Personal responsibility | Learning activities |
| Fictional stories risky; vacillating between keep or throw out | **Student expectations** | **User requirements** |
| What should the tone of the text be? | Size up class | Balance of structure and narrative |
| Should instructor's guide have been written at the same time? | Traditional student mode of listen/recall/exam | Guidance on project transfer |
| How to represent media throughout text? | Structure vs. chaos | **Writer's requirements** |
| Scenarios limited? | What does teacher want? | Sequence on design activities |
| What do readers need now (at each page) | Design activities workbook-like | Stories in the back |
| Is the text inviting? | | Glossary non-traditional |
| Sections to cut out | | Tables |
| How much "big picture" and when? | | End of chapter summaries |
| **Collaboration** | | Tone of text |
| Mutual ideas/goals | | 15-point line spacing and Palatino font |
| Roles of two authors different | | Room in margins to write notes |
| Pressure of deadlines | | |
| Differences arising on some features | | |
| Pressures from outside commitments | | |
| Trust and honesty | | |
| Respect for views and one's work | | |
| Who wrote what? | | |

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**Step 3: Identifying speech genres that match themes.**

Writers

| Theme | Speech Genre-"Who's Doing the Talking?" |
|---|---|
| Expertise | Education: different views on how to direct or support learning<br>Instructional systems development discipline: prescriptive conceptualization and pressures to simplify design process<br>Educational psychology: range of theoretical basis of learning and extracting learning principles from these<br>Teaching research: value of research and development of teacher knowledge<br>Academy: research and publication |
| Book writing | Traditional texts: what does a book like?<br>Theory: cognitive structuring<br>Authority: truth statements, decisions on content and treatment, taking responsibility. |
| Collaboration | Community: writers as colleagues<br>Ethical: emergent nature of product impossible to pin down who wrote what<br>Moral: what have we written? |

Readers

| Theme | Speech Genre-"Who's Doing the Talking?" |
|---|---|
| Identity | Personal: who am I? can I do this?<br>Family and friends: pressures to perform and finish; interpersonal relationships.<br>Institutional: rules, choices, and negotiation. |
| Professional goals/aspirations | Occupational uncertainties<br>Privileged status from higher education |
| Student expectations | Cognition: ongoing efforts to make meaning out of new experiences<br>Metacognition: how much effort will be needed, what do I need to do |

Artifact

| Theme | Speech Genre-"Who's Doing the Talking?" |
|---|---|
| Publisher requirements | Industry: pressures to compete and remain profitable |
| Adopter requirements | Teachers: practical addition to make life easier |
| User requirements | Student: will this be helpful? |
| Writer requirements | Audience: is this written appropriately for the audiences?<br>Content: is the nature of the book's content appropriately structured and written for the audience?<br>Treatment: does the book have an appeal and features to support student learning? |



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